UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,646	03/17/2004	Tyler Foley Baker	002002	2645

29569 7590 10/05/2006		EXAMINER	
JEFFREY FURR		FATEHI, PARHAM R	
253 N. MAIN STREET			
JOHNSTOWN, OH 43031	ART UNIT	PAPER NUMBER	
	2146		

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>17 March 2004</u>.

2a)☐ This action is **FINAL**.　　　2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-10</u> is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-10</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>3/17/2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All　b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-SB/08)
　　Paper No(s)/Mail Date <u>3/17/2004</u>.

4) ☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____ .

DETAILED ACTION

1.   ***Information Disclosure Statement***

The information disclosure statement filed 03/17/2004 fails to comply with the

provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because citation 1 incorrectly

discloses US Patent No. 5892946 as having Water as a Patentee (suggested: Woster et

al). It has been placed in the application file, but the information referred to therein has

not been considered as to the merits. Applicant is advised that the date of any re-

submission of any item of information contained in this information disclosure statement

or the submission of any missing element(s) will be the date of submission for purposes

of determining compliance with the requirements based on the time of filing the

statement, including all certification requirements for statements under 37 CFR 1.97(e).

See MPEP § 609.05(a).

2.   ***Oath/Declaration***

The oath or declaration is defective. A new oath or declaration in compliance

with 37 CFR 1.67(a) identifying this application by application number and filing date is

required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because: inventor's signature is not valid.

3.   ***Specification***

The following title of the invention is not descriptive: "[Insert title of

invention]System for object cloning and state synchronization across a network node

tree." A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: SYSTEM FOR OBJECT CLONING AND STATE SYNCHRONIZATION ACROSS A NETWORK NODE TREE.

The disclosure is objected to because of the following informalities: Par. 5, messagingstandards (suggested: messaging standards), CORBA (should be spelled out), DCOM (should be spelled out). Par. 8, client to manipulate on the client (suggested: client to manipulate on the network). Par. 13, objectsbe (suggested: objects are), willstore (suggested: will store), invariety (suggested: in a variety). Par. 17, object being (suggested: objects are being). Par. 22, objectsbe (suggested: objects are), commercialsolutions (suggested: commercial solutions). Par. 26, connection point where clients and branch node 32s (32s not in drawing, suggested: 32). Par. 41 and 42, a security...hierarchy (improperly formatted). Par. 58, AdvantagesThe (suggested Advantages The).

Appropriate correction is required.

4.   *Claim Objections*

Claims 1 and 7 are objected to because of the following informalities:

Claim 1, line 10 and claim 7, line 18 limit "compute" but "computer is suggested. Appropriate correction is required.

Claims 2 and 8 are objected to because of the following informalities:

Claim 2, line 18 and claim 8, line 1 limit "nodes treated" but "nodes are treated" is suggested. Appropriate correction is required.

Claim 6 is objected to because of the following informalities: TCP/IP should be spelled out and I/O should be spelled out. Appropriate correction is required.

Claims 1 and 7 are objected to because of the following informalities: claim components are separated by a comma (,) but should be separated by a colon (;) as in claim 1, lines 8, 11, 15, 19, 21, 23, 25, 27, 29, 31 and 33. Claims 1 and 7 contain redundant wording ("with") as in 1e, 1f, 1g, 1h, 1i, 1j and 7e, 7f, 7g, 7h, 7i and 7j. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the root node" in the 3rd line of the claim. There is insufficient antecedent basis for this limitation in the claim. Suggested: "a root node."

Claim 1 recites the limitation "the branch nodes" in the 3rd line of the claim. There is insufficient antecedent basis for this limitation in the claim. Suggested: "branch nodes."

Claim 1 recites the limitation "a root node" in the 5th line of the claim. Suggested: "said root node."

Claim 1 recites the limitation "a plurality of branch node computers" in 6th line. Suggested: "plurality of branch node computers."

Claim 1 recites the limitation "branch node computers" in the 10th line of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the connecting computer" in line 31. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 recites the limitation "like branch nodes" in line 3. Suggested: "like said branch nodes."

Claim 4 recites the limitation "a connection tree manager" in line 1. Suggested: "said connection tree manager."

Claim 5 recites the limitation "a distributable object" in line 1. Suggested: "said distributable object."

Claim 5 recites the limitation "a root node computer" in line 2. There is insufficient antecedent basis for this limitation in the claim. Suggested: "said root node computer."

Claim 7 is rejected under the same reason as claim 1 above.

Claim 8 is rejected under the same reason as claim 2 above.

Claim 9 is rejected under the same reason as claims 3 and 4.

Claim 10 is rejected under the same reason as claim 6 above.

Regarding claim 1 and 7, the phrase "may have" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

5.   *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Rich et al (US Patent 6,457,065) in view of Straube et al (US Patent 6,446,077 B2).

As per claim 1, Rich teaches a distributed object messaging system (distributed

object system, 2:45-67), a process of distributed object synchronization (2:45-57),

across network node tree (a nested transaction tree, col 10, ln 42-50, col 11, ln 35-40),

in which the root node (node_1/top-level transaction fig. 4A) and the branch nodes

(node_1.1, node_1.2, fig. 4A) act in combination as a centralized server (col 1, ln 27-37)

with a network node tree (col 11, ln 35-40) where a root node computer (node_1/top-

level transaction fig. 4A) at the top of the network node tree (11:35-40/Fig.4A) has a

plurality of branch node computers (child 416, 417, col 11, ln 18-65 / Fig. 4A)

maintaining a network connection to it at any given time (nodes might then be added

throughout the transaction tree, col 11,ln 2-14), in which each branch node computer

have one or more branch node computers maintaining a network connection to it at any

given time (col 11, ln 18-65 / col. 6, ln 1-45), a set of distributable objects (distributed

object system, c10, ln 1-17) whose origination resides (a global repository, col 10, ln 1-

17) on the root node computer (node_1 401, col 10, ln 1-17), are cloned and transmitted

across the network connection to descendant branch node computers (copy of object, col 10, In 1-17 / server 402, client workstation 403, col 10, In 1-42 / Fig. 4A), with a security controller in said root node computer environment (the obtained version...ancestor node, col 3, In 12-55), with said security controller creating a security controller clone (checking, col 3, In 12-55 / method, col 12, In 6-26), with said security controller clone creating an authentication interface in the connecting computer (main window, col 10, In 42-67), with said authentication interface creating authentication data (customer's name or ID, col 10, In 42-67 / registered, col 10, In 17-25), with said authentication data is transmitted to the root node (col 12, In 16-26), with said root node using the authentication data to authenticate the connecting computer (registered into the transaction, col 12, In 16-26), where if validated the root node returns registration data to the branch node (the new version has been registered, col 12, In 16-26), and where a connection tree manager controls the placement of the connecting computer on the network node tree (col 10, 42-67).

Rich does not explicity disclose "where if a change is made to the distributable object on the root node computer, that change is redispatched across the network connection to the distributable object." However Straube, in an analogous art, teaches "where if a change is made to the distributable object on the root node computer, that change is redispatched across the network connection to the distributable object (col 1, In 20-67 / col 6 & 7, In 59-67 & 1-6)." It would have been obvious to one of ordinary skill in the art to apply the teaching of Straube to Rich in order to keep track of information which is stored in or described by objects. Detecting a change to a distributable object

on the root node and redispatching said change across the network to the distributable

object is desirable for synchronization purposes.

As per claim 2, Rich teaches said branch nodes and said root nodes may have

leaf nodes where said leaf nodes treated like branch nodes by the system (work station

403, col 10, ln 1-42 / Fig. 4A / transactions are considered as having a parent, col. 15, ln

47-65).

As per claim 3, Rich explicitly teaches a new peer connecting to an already

existing peer on the network can download the synchronized state of these data objects

without having to get said data from the original host (col 3, ln 15-55 / col 10, ln 42-67).

As per claim 4, Rich explicitly discloses where a connection tree manager

instructs all nodes where to connect in a network (the main window...distributed

network, col 10, 42-67).

As per claim 5, refer to the rejections of claims 1 and 2.

As per claim 6, Rich explicitly teaches a root server is created and said root

server (col 10, ln 1-17) forms an I/O channel through a TCP/IP socket (col 6, ln 1-23 &

col. 6, ln 1-45).

As per claim 7, it is identical to claim 1 and is rejected for the same reasons as

claim 1.

As per claim 8, it is identical to claim 2 and is rejected for the same reasons as

claim 1.

As per claim 9, it rejected for the same reasons as claims 3 and 4.

As per claim 10, it is identical to claim 6 and is rejected for the same reasons as claim 6.

6.   *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Parham (Paul) R. Fatehi whose telephone number is 571-272-1407. The examiner can normally be reached on M-Th 7:30AM-5PM EST, off alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chameli Das can be reached on (571)272-3696. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Parham (Paul) Fatehi
Examiner
Art Unit 2146

PRF

CHAMELI DAS
SUPERVISORY PATENT EXAMINER
9/28/06.